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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,106	12/15/2003	Gerald L. Everett	200315774-1	5509

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EXAMINER

CHOI, WOO H

ART UNIT PAPER NUMBER

2189

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/737,106	EVERETT ET AL.	
	Examiner	Art Unit	
	Woo H. Choi	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 – 4 and rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 2 recites the limitation “said system call requesting said memory allocation”. There is insufficient antecedent basis for this limitation in the claim. It is also not clear whether “said system call” is for one memory allocation or three separate allocations. Claims 3 and 4 are rejected for containing deficiency of the parent claim as discussed above.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 – 3, 8 – 14, 18 – 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Cepulis et al. (US Patent Application Publication No. 2004/0123092, hereinafter “Cepulis”).

8. With respect to claims 1 – 4, 8 – 14 and 18 – 22, Cepulis discloses a computer implemented method for establishing a run-time data area comprising:

relocating a firmware module from a read-only memory location to a writeable memory location during a system boot-up operation;

reserving a portion of said writeable memory location comprising a memory allocation for said firmware module and an additional memory allocation; and

designating said additional memory allocation as said run-time data area, wherein said run-time data area is created without requiring prior knowledge of system resource allocation (page 3, paragraph 19 and page 4, paragraph 21, Cepulis discloses that BIOS ROM is shadowed, i.e., relocated to writable area, and that PAL and SAL may implement spin locks; spin lock is run-time data that requires memory and allocation of this memory that does not require prior knowledge of system resource).

9. With respect to claims 3, 4, 8 – 14, see figures 1 and 3, allocating shadow to load PAL and SAL routines require knowledge of sizes of routines. Likewise, the spin lock variable storage size must be known for proper reading and writing of the variable.

10. With respect to claim 21, see figure 3.

11. Claims 1, 8, 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Malek et al. (US Patent No. 6,611,912, hereinafter “Malek”).

With respect to claim 1, 8 and 18, Malek discloses a method for creating a system independent run-time data storage area comprising:

intercepting a system call for determining the size of a system firmware feature during a system boot-up operation (figure 4. 403);

returning a response to said system call conveying a request for a portion of a writeable memory location (403, 404); and

reserving a portion of said writeable memory location, wherein a memory allocation is designated as said run-time data area, wherein said run-time data area is created without requiring prior knowledge of system resource allocation (see figure 2, System RAM and figure 3 system memory 304, areas other than Add-on ROM are available for run-time data and run-time programs, see also 301, 302, and 406, these areas contain configuration data required at run-time – prior knowledge of system resource allocation such as allocation of device drivers, for example, are not required at this point as these resources are loaded later in the operating system boot process)

12. With respect to claims 9 and 10, see figure 4.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5 – 7, 15 – 17 and 23 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malek in view of Fish (US Patent No. 6,199,159).

Malek discloses all of the limitations of the parent claims as discussed above. However, Malek does not specifically disclose that the firmware module operates in real mode and virtual mode. On the other hand, Fish discloses a computer system that operates in real mode and virtual mode (Fish, figure 4).

Response to Amendment

15. Claims 13 and 20 have been amended to overcome prior rejections under 35 USC 112, second paragraph. Corresponding rejections are withdrawn.

Response to Arguments

15. Applicant's arguments filed on August 3, 2006, have been fully considered but they are not persuasive.

35 U.S.C. 112 Rejections

While the limitation “receiving a system call for a system firmware feature” can be the antecedent basis for “said system call”, it is not the antecedent basis for “returning a response to said system call requesting said memory allocation” because there is no recitation of “a system call requesting” any memory allocation prior to the limitation in question. A system call for a

system feature is no the same as a system call requesting a memory allocation. Moreover, it is not clear whether the response is to one system call requesting three memory allocations or three separate system calls requesting a memory allocation.

35 U.S.C. 102 Rejections

Applicant's "argument" regarding Cepulis is not persuasive because Applicant simply quotes from a paragraph that was not even cited in the rejection and concludes that what Cepulis teaches is different from a claimed limitation. Applicant has not even addressed the actual rejection at all. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

With respect to Applicant's argument regarding Malek, Applicant simply asserts that Malek fails to teach "relocating ... operation." Mere assertions are not enough to overcome a rejection. Applicant further asserts that shadowing contents is very different from "relocating ... operation" without explaining the differences and without discussing why Malek's teaching of copying a firmware module from a ROM into main memory area during a boot-up operation is patentably distinct from Applicant's "relocating" that copies a firmware module from a read-only location to a writeable location during a system boot-up operation (see figure 2A). Characterizing what is essentially a copying operation as a "relocation" does not make an invention patentably distinct from prior art operations that perform the same functions.

35 U.S.C. 103 Rejections

Applicant has failed to make any argument different from the “argument” presented with respect to 35 USC 102 rejections. Accordingly, Applicant has failed to overcome the prima facie case of obviousness presented above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (571) 272-4179. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Reginald Bragdon can be reached on (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2189

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Woo H. Choi
October 13, 2006